

Customer No.: 31561
Docket No.: 11555-US-PA
Application No.: 10/605,099

In The Claims

Claims 1-3. (cancelled)

Claim 4. (currently amended) A method of accessing a large block memory of a nonvolatile memory device, wherein the large block ~~flash~~ memory has a plurality of pages and each page has a plurality of sectors, wherein the memory device has a controller to control an access operation between a host and the large block memory of the memory device, the controller also has two buffers regions, the method comprising:

transferring a portion of a current page data from the host to the controller, and transferring a portion of the current page data from the controller to a data cache within the large block memory, wherein the two transferring steps can be performed at the same time;

shifting the current page data in the data cache to the a page buffer within the large block memory, when full data of one page is received and a storage space of the page buffer is available; and

programming the current page data into a cell array of the large block memory, and simultaneously performing the foregoing two transferring steps if a next page data is desired to continuously transfer.

Claim 5. (previously presented) The method of claim 4, wherein in the step of shifting the current page data in the data cache to the page buffer, a command is issued to

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perform the step.

Claim 6. (cancelled)

Claim 7. (original) The method of claim 4, wherein in a time period, at least two of the two transferring steps and the programming step are performed at the same time.

Claim 8. (original) The method of claim 4, wherein in a time period, all of the two transferring steps and the programming step are performed at the same time.

Claim 9. (previously presented) The method of claim 4, wherein when a last page is received, a start program command is issued to program the memory cell array

Claim 10. (currently amended) ~~The method of claim 4, wherein~~ A method of accessing a large block memory of a nonvolatile memory device, wherein the large block memory has a plurality of pages and each page has a plurality of sectors, wherein the memory device has a controller to control an access operation between a host and the large block memory of the memory device, the controller also has two buffers regions, the method comprising:

transferring a portion of a current page data from the host to the controller, and transferring a portion of the current page data from the controller to a data cache within the large block memory, wherein the two transferring steps can be performed at the same time;

shifting the current page data in the data cache to the a page buffer within the large block memory;

programming the current page data into a cell array of the large block memory, and simultaneously performing the foregoing two transferring steps if a next page data is

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desired to continuously transfer; wherein

before a last page is received, a "start program with data cache" command is issued for simultaneously receiving the data at the data cache and programming the data at page buffer into the cell array of the large block memory.